Claims:

1(Canceled).

2(Once amended). A wireless communication system of claim [1] 4, wherein said first transmission frequency is from a first set comprised of a limited first predetermined number of frequencies and wherein said second transmission frequency is from a second set comprised of a limited second predetermined number of frequencies, whereby said first set of frequencies is different than said second set of frequencies.

3(Original). The wireless communication system of claim 2, wherein said first predetermined number of frequencies is three and said second predetermined number of frequencies is three.

4(Thrice amended). [The] A wireless communication system [of claim 1] comprising:

a pattern of cellular radio communication cells; and

a base station for communicating with one or more user stations, the base station dynamically assigned a first transmission frequency for transmitting in a first cell of said pattern of cells, said first transmission frequency not being assigned to any base station for transmitting in any cell in said pattern of cells adjacent to said first cell; and the one or more user stations each assigned a second transmission frequency for transmitting to said base station, said second transmission frequency not being assigned to any user station in any cell in said pattern of cells adjacent to said first cell;

wherein said base station [is dynamically assigned said first transmission frequency] and said user stations communicate using time division multiple access.

5(Once amended). The wireless communication system of claim [1] 4, wherein the user stations in said first cell are dynamically assigned said second transmission frequency.

6(Twice amended). [The] A wireless communication system [of claim 1], comprising:

a pattern of cellular radio communication cells;

a base station assigned a first transmission frequency for transmitting to a first cell in said pattern of cells, said first transmission frequency not being assigned to any base station for transmitting to any cell in said pattern of cells adjacent to said first cell; and

one or more user stations each assigned a second transmission frequency for transmitting to said base station for the respective first cell, said second transmission frequency not being assigned to any user station in any cell in said pattern of cells adjacent to said first cell;

wherein said base station and user stations communicate using time division multiple access, and transmissions between said base station transmitting to said first cell and the user stations in said first cell are time division duplexed [wherein transmissions between said base station transmitting to said first cell and the user stations in said first cell are time division duplexed].

7-11(Canceled).

12(Once amended). A wireless communication system, comprising:

a pattern of cells; and

a base station associated with a first cell in said pattern of cells for communicating with one or more user stations in the first cell;

[one or more user stations;]

wherein said base station is assigned a first transmission frequency for transmitting [to a] in the first cell in [said] the pattern of cells, said first transmission

frequency not being assigned to any base station for transmitting in any cell [in] of said pattern of cells adjacent said first cell;

wherein said user stations in said first cell are assigned a second transmission frequency, said second transmission frequency not assigned to any user stations in any cell in said pattern of cells adjacent said first cell;

wherein said base station is further assigned a first spread spectrum code for modulating radio communication for said first cell; and

wherein said user stations in said first cell are each assigned a second spread spectrum code for modulating radio communication from said first cell.

13(Once amended). The wireless communication system of claim 12, wherein said first transmission frequency is from a first set comprised of a limited first predetermined number of frequencies and wherein said second transmission frequency [if] is from a second set comprised of a limited second predetermined number of frequencies.

14(Original). The wireless communication system of claim 13, wherein the frequencies of said first set of frequencies are mutually exclusive of the frequencies of said second set of frequencies.

15(Original). The wireless communication system of claim 13, wherein said first predetermined number of frequencies is three and said second predetermined number of frequencies is three.

16(Original). The wireless communication system of claim 12, wherein said base station is dynamically assigned said first transmission frequency.

17(Original). The wireless communication system of claim 12, wherein a user station is dynamically assigned said second transmission frequency when it enters said first cell.

18(Original). The wireless communication system of claim 12, wherein each base station servicing said pattern of cells uses said first spread spectrum code for modulating radio communication for said pattern of cells and wherein each user station in said pattern of cells uses said second spread spectrum code for modulating radio communications from said pattern of cells.

19(Original). The wireless communication system of claim 12, wherein said pattern of cells comprises a repeated pattern of cells consisting essentially of a first class of cells, a second class of cells, and a third class of cells, wherein no member of said first class of cells is adjacent to another member of said first class of cells, no member of said second class of cells is adjacent to another member of said second class of cells and no member of said third class of cells is adjacent to another member of said third class of cells.

20(Original). The wireless communication system of claim 12, wherein said first spread spectrum code and said second spread spectrum code comprise a set of codes with minimal cross-correlation attributes.

21(Canceled).

22(Twice amended). [The] A multiple user wireless communication system [of claim 17,] comprising:

a plurality of cells;

a base station located in each cell to transmit over a first frequency; and

one or more user stations in communication with said base station to transmit over a second frequency different from said first frequency;

wherein transmitters in a first cell are assigned a first code for modulating radio communication in said first cell and radio signals used in said first cell are spread across a bandwidth sufficiently wide that receivers in a second cell adjacent to the first cell may distinguish communication which originates in said first cell from communication which originates in said second cell;

wherein said first cell using said first code is not adjacent to any other cell using said first code and said base station communicates with said user stations using time division duplexing.

23(Canceled).

24(Twice amended). [The] A multiple user wireless communication system [of claim 19, wherein] comprising:

a plurality of cells;

a base station assigned a first transmission frequency for transmitting to a first cell in said plurality of cells, said first transmission frequency not being assigned to any base station for transmitting to any cell in said plurality of cells adjacent said first cell; and

a plurality of user stations in said first cell assigned a second transmission frequency not assigned to any user stations in any cell in said plurality of cells adjacent said first cell;

wherein said base station and said user stations in said first cell are assigned one or more distinct codes for modulating radio communication for said first cell; and

wherein said base station is assigned a first set of one or more distinct spreading codes for communicating with user stations in said first cell[, said first set of one or more distinct spreading codes not being assigned to any base station for communicating in any cell in said plurality of cells adjacent said first cell, and wherein said user stations in said first cell are assigned a second set of one or more distinct spreading codes, said] that are not assigned to any base station for communicating in any cell in said plurality of cells adjacent said first cell, and said user stations in said first cell are assigned a second set of one or more distinct spreading codes that are not assigned to any user [stations] in any cell in said plurality of cells adjacent said first cell.

25(Once amended). The wireless communication system of claim [19] 24, wherein said base station communicates with said user stations using time division duplexing.

26-29(Canceled).